ENTERED



1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/776,705B

DATE: 08/11/2003 TIME: 12:31:10

Input Set : A:\1010 SEQ LISTING.TXT

Output Set: N:\CRF4\08112003\I776705B.raw

```
4 <11) APPLICANT: Karl GUEGLER et al.
 6 <120 TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
         NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
         AND USED THEREOF
10 <130 FILE REFERENCE: CL001010
1. <140 - CURRENT APPLICATION NUMBER: 09/176,705B
1 < < 141 + CURRENT FILING DATE: 2001-02-96
15 <150 - PRIOR APPLICATION NUMBER: 60/251,836
16 <151 PRIOR FIGING DATE: 2000-12-03
1% <160 - NUMBER OF SEQ ID NOS: 78
Ru <170 - SOFTWARE: FastSEQ for Windows Version 4.0
31 K210 - SEO ID NO: 1
25 K211 - DENGTH: 1822
DG KDID - TYPE: DNA
25 <213 · ORGANISM: Homo Sapiens
.:7 <400 · SEQUENCE: 1
\mathbb{R}^p coathocasa casqtoagga asgeotycac aggabtggat aastaattaa gaacagagtg 66
.19 tubbyaabat daadabaaag tiggaagaado tuaagotigaa gigtabagtat attatutaba 120
^{2}O orga_{0}ggggo tigitgigg abaa_{3}aaago got_{3}acagot caa_{4}tg_{2}ato coat_{3}gaact _{1}8_{0}
31 gagawatgto aacatogaac cagatgatga gagcagcagt ggagaaagtg ctocagatag $40
32 chacutcagg ataggaaatt cagaaaaggo agcaatgago agtcaatttg ctaatgaaga 300
rs cubtyaaagt cagaaattob tyacaaatyy attittyyyy aasaaagaago tyybagatta 360
s4 twotgatgas caccatocog gasocactto otttggastg tottbattts acotgagtas 410\,
20 typoatoaty gycagtygga tootyggott gtootatypo atygootada baggygtoat 400
56 abtititata atratgoigo tigoigiggo aataitatoa oigiattoag tioabbitti 540\,
z7 attawaaaca gocaaggaag gagggtottt gatttatgaa aaattaggag aaaaggcatt 60\%
FF tigatggoog ggaaaasttg gagottttgt ttocattaba atgbagaaca ttggagoaat 660
39 gloaagetab ototttatoa tiaaatatga actaootgaa gtaatoagag battoatggg 710
40 antiquagea astactogag salgytacct castggcase tacctesce tatttgtgtc 780
4) tyttiggaatt attottooso tittogotoot taaaaaattta ggitatottig gotataoosig 840
40^\circ tyganitttot ottacotgoa tygityttitt tyrtaytyty ytyattiaca agaaattoca 90\%
A_{c} autalectic objects tritiquates carryings satisfying to accept a_{c} = a_{c} + a_{c} + a_{c}
44 getticaatg catetegtaa tettacoccaa caacteteag agtteteate teaactteat 1000
4: gatgqattac acceacegea atcetgeagg getggatgag aaceaggeea agggetetet 1000
40 thatyacagt ggagtagaat atgaagotoa tagtgatgab aagtgtgaab ocasatactt 1140
4) tytaktbaac toooggabgg ootatgeaat tootatoota gtattigett tigtatgeba 1200
48 chethaggie etteocatet abagigaadi taaagalegg tedeggagaa aaatgeaaad 1,60
4\% gatqtesaaat attteeatea eqqqqatqet tqteatqtae etqettqeeq ecctetttqq 1/30
f(-t)ac\phitsac\phi tictatggag aagtigaaga igaattacti daigootada gcasagigta 1 \gg 0
El taca: tagac atocototto toatggitog cotggoagto ottgtggoag taacacaaan 1440
12 terraceceatt greetettee caattegrae ateagrgate acaetgrat treceasaeg 1:00
^{4.5} accentrage tygahargar attitizetgat tyragetyty ethattycar thasiaatyt 1^{6.0}
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54 tetgyteate ettgtgecaa etataaaata eatettegga tteatagggg ettettetge 1920

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/776,705B

DATE: 08/11/2003 TIME: 13:31:16

Input Set : A:\1010 SEQ LISTING.TXT
Output Set: N:\CRF4\08112003\1776705B.raw

55 cactalgelg allittatle ticeagesgl tilllatell adactiglea agaaagdade 1680 56 tittaggida kvovaaaagg toggggdift aaflittootf qiggitggaa tattoijoaf 1740 57 gattygaagi afggoactia ttatsattga ittggattfat gutcoticeaa aftecaugea 1800 57 teactaacan auggaaaaat ac 6: -310> SEQ IL MO: 2 61 < 811> LENGTH: 547 6 <312> TYPE: PRT 6 + < 313 > ORGANISM: Homo Sapiens 6 - <400> SEQUENCE: 2 66 Met Asp Pro Met 31u Leu Arg Ash Val Ash ile Glu Pro Asp Asp Glu 10 6 Ser Ser Ser Gly Slu Ser Ala Pro Asp Ser Tyr Ile Arg Ile Gly Asn .25 30 Ser Gru Lys Ala Ala Met Ser Ser 3ln Phe Ala Asn Glu Asp Thr Glu ~i 3~; 40 T. Ber G.r. Lys Fne Leu Thr Asn Gly Phe Leu Gly Lys Lys Lys Leu Ala 51) 5.5 74 Asp Tyr Ala Asp Glu His His Pro Gly Thr Thr Ser Phe Gly Met Ser 7.0 75 To Ser Pha Asm bed Ser Asm Ala Ile Met Gly Ser Gly Ile Leu Gly Leu $\gamma_{i,j}$ 35 90 95 7- Ser Tyr Ala Met Ala Tyr Thr Gly Val Ile Leu Phe Ile Ile Met Leu 94 190 1.05 8. Den Ala Val Ala lie Leu Ser Leu Tyr Ser Val Eis Leu Leu Leu Lys 1:5 -1.201...5 Thr Ala Lys Glu Gly Gly Ser Leu Ile Tyr Glu Lys Leu Gly Glu Lys 130 1 35 1.40 84 Ala Phe Gly Trp Pro Gly Lys Ile Gly Ala Phe Val Ser Ile Thr Met 155130 16080 Gln Asr Ile Gly Ala Met Ser Ser Tyr Leu Phe Ile Ile Lys Tyr Glu ± 7 165 170 175 85 Leu Pro Glu Val Ile Arg Ala Phe Met Gly Leu Glu Glu Asr. Thr Gly 14.54 180 185 Bo Glu Trp Tyr Leu Asn Gly Asn Tyr Leu Ile Ile Fhe Val Ser Val Gly 195 200 2015 9. The The Lou Pro Leu Ser Leu Leu Lys Ash Leu Gly Tyr Lou Gly Tyr 220 210 215 94 Thr Ser Gly Phe Ser Leu Thr Cys Met Val Phe Phe Val Ser Val Val 230 235 96 Lie Tyr Lys Lys Phe Gln II ϵ Pro Cys Pro Leu Frc Val Leu Asp His 245 250 98 Ser Val Gly Ash Leu Ser Phe Ash Ash Thr Leu Pro Met His Val Val 2 € 5 270 260 100 Met Leu Pro Ash Ash Ser Glu Ser Ser Asp Val Ash Phe Met Met Asp 280 102 Tyr Thr His Arg Asn Pro Ala Gly Leu Asp Glu Asn Gln Ala Lys Gly 295 300 104 Ser Leu His Asp Ser Gly Val Glu Tyr Glu Ala His Ser Asp Asp Lys 105 505 310 315 320

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/776,705B

CATE: 08/11/2003
TIME: 12:31:16

Input Set : A:\1010 SEQ LISTING.TXT

Output Set: N:\CRF4\08112003\1776705B.raw

106 107	Cys	Glu	Pro	Lys	Tyr 32 E	Phe	Val	Phe	Asn	Ser 33)	Arg	Thr	Ala	lyr	Ala 335	ile	
	Pro	Ile	Leu	V 11 340		Ala	Phe	Vetl	Cys 345		Pro	Glu	Val	Leu 350	Pro	Ile	
1!" 111	Tyr	Ser	31u 355	Liet.	Γλ.ē	Asp	Arg	Ser 360	Arg	Arş	Lуŝ	Met	Gln 365	Thr	Vãl	Ser	
11. 113	A. r.	:1⊖ 370	Ser	110	Tr. r	Gly	Met. 375	Lega	V a 1	Met	Туг	Leu 380	Lou	Æla	Al s	Leru	
	Pile 383	::1 <i>y</i>	Туг	Leeu	Thr	Phe 390	Tyr	Эшү	Gl.	Val	Gl: 395	Asp	Glu	Leau	Les	His 400	
$\frac{110}{112}$	Ala	ΩŻr	Ser	Lys	V a 1 4 (.)	ľУr	Thr	T-s.T	$A.(\xi)$	I 1 ⊕ 4 1 €	Pro	S⊕u	L∙eu	Met	Vāl 415	Arg	
1 l ·· 1 l ·	ir a	Ala	V-§ 1	Leid 4.10	Val	Ala	V-ā l	Thr	61n 425	Thr	Vāl	Pro	ILe	Val 430	Leu	Phe	
1.10 1.11	$\Gamma: \ominus$!1⊕	Arg 435	Thir.	S⊕r	Vāl	lle	Thr 440	Leu	Leu	Phe	Pro	Бу≲ 445	Arg	Pro	Phe	
1. 3		4 E G					455					460			Leu		
1.115	465					470					475				Gly	450	
1.17		_			485					490					Ala 495		
1				5.00					505					510	Gln		
1/1			515					520					525		Ile		
133		e, 3 C		ьец	1148	He	110 535	Asp	Trp	1148	туг	540	Pro	Pro	Asn	Ser	
135	545	His		D. NO.	. 3												
				D NO: H: 32													
		2 · T			201.												
					Homo	o Sar	oiens	5									
141 - C13 - ORGANISM: Homo Sapiens 143 - C400 - SEQUENCE: 3																	
144	ages	ttago	cha 1	tatg	gatda	aa ga	aggto	ccaat	i acc	ctgat	taa	taaa	aagtt	ito a	aggaq	gtaaac	κîΟ
145	ana	g-g-g-g-	вад з	aaat:	agttt	it tt	taa	atagt	i aga	aactt	ittt	ttat	ittt	ag :	aaaat	igtqtc	1110
			_			_		_		_	_		_	-		tgaatt	
		-														ctgaaa	
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149				-												gaatto	
150					-					-			-	_		ccagaa cttago	
15.																uruayo gotgaq	
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157		-	_					_		-	-			_	_	gtagga	

RAW SEQUENCE LISTING DATE: 09/11/2003 PATENT APPLICATION: US/09/776,705B TIME: 12:31:16

Input Set : A:\1010 SEQ LISTING.TXT

Output Set: N:\CRF4\08112003\I776705B.raw

158	gaaggaagga	aagaaagaaa	aagtatgota	atgtccttat	tttttatggg	taaccagtot	H;::)
153	aaaatcagta	aaccaaqtca	aaaaagsttt	agtgaattat	teagatetag	aatggotaac	3 x , (7)
1+11	tttaaqtaac	aagotaaaaa	cagaaaccqt	caatagtggt	tactactaga	aagtgagact	16.10
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			-	-		gattattta	
						littigtcast.	
						tttatttcta	
						aattototat	
						adattootot	
						qaqtqattto	
						aaantthaan	
						daadagodtg	
						ottattttga	
						ottttaaatt	
						tactggcact	
						gtgaactttt	
						ggaggtatto	
						ggaggaattt	
				-		tgtcatgacc	
						attqaatqaa	
						toaaggoatt	
						aatgaggtoo	
						gaggotaaaa	
						gtaatgctga	
						caggatocaa	
						atcaaccatt	
		•				ttotagttat	
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						ttoottgaag	
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						gtaatttoot	
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					-	acaaaatgta	
						ttgtgttctg	
						gotgaaggta	
						acageteaaa	
						agcagtggag	
	, ,		_	-		atgagcaggt	
						catggaaaac	
			-	_		aatgatattg	
						tottttgtga	
						ataattttaa	
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			totgaatgto			,	-: 6,0 -: 6,60
			aaagttaaac				
		-	cctctagtaa			_	3710
رالال	tgtagcaact	cactcaaaag	cocctaggtg	taaactttga	cocacatago	caacggtcag	2/60

DATE: 08/11/2007

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/776,705B TIME: 12:31:16

Input Set : A:\1010 SEQ LISTING.TXT

Output Set: N:\CRF4\08112003\I776705B.raw

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	totactgtgg						5.400
	atataaatgt						51.66
	totottadaa						46.0
	ocaatagoda				gcacqtaaqq		
.:1.		acctgaccst			otocotatti		
.113	godítdadtő	-		-			
	Étgacacoto						
.:14				atgaacataa			45.10
12.6				taatggooto			
				gttatitgat			
-, -				gatgotoága			
.] .1	taggogtgaa						
				ottosťtoma			
	ttägggatgt						
	tgaddottga						4740
	geetgaettt						48000
	aaccaacago						
	ttttttatťa						
	tttotgaaag						
	accotoctaa						
	agcatgaatg						
	cttttatete						
	agatgggttt						
	tcaacataat						
1:3.:				ttotoatota			
.:35	ttaaatgact						
2.34	asatotottt	actiticaaat	totoaatttt	aaaaactact	atggaataca	gattttagtt	5460
135	tattgattaa	aataaagatt	ccagagttta	aattotaggt	ggcacttttg	tttttatagt	5510
. 56	cottoaggood	attttagget	toattttato	otgtoatoto	agtotocaac	tgtgaacatt	5.5 % ()
237				aattacagac			
238	gagtggtggg	cagtgggtgg	ggggtgaatg	gaaatggaaa	gaggoaacaa	ctgagggcat	5700
239	tgtgatttat	gtgagaaata	tggggagaag	getaggaaat	gttcttaact	tgtgtactca	5740
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1.1	totocagatt	attttcagga	ttagettetg	ttataaaaaa	tagettgtae	agatotoota	5940
. 4	caataattat	tttctatttt	atttctaagg	tttatttatt	tatttattga	gacagacaga	$\epsilon_i(0)(0)$
_4.;	gtttdactct	tgtggcccat	getggagtge	aatggtgcaa	totoggotoa	otgoaacoto	e O GC
. 4 5	tgootcoocag	gttbaagoga	ttataatgat	toagootoot	gagtagetgg	gattacaggc	$\mathbf{C} = \mathbf{C}$
246	gostgosacc	acactogget	aactttttgt	atttctagta	gagacgaagt	ttcaccatgt	61⊬Ü
.147	tggccaggct	ggtottgaac	tootgacctc	aagttatoca	cocacataag	cotocoaaag	6240
	tgctgggatt						
	tottcaatta			_			
	caaaccctca						
10.2	caactaaaaa	gtotgtgaca	ttttgcagta	taaaaatgca	atggcagcag	caggeettat	n4aÚ
	taattgagcc						
	gtaactgcag						
	tocaagaaaa						
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/776,705B

DATE: 08/11/2003 TIME: 12:31:17

Input Set : A:\1010 SEQ LISTING.TXT

Output Set: N:\CRF4\08112003\I776705B.raw

STATISTICS SUMMARY

DATE: 08/11/2003 TIME: 12:31:17 PATENT APPLICATION: US/09/776,705B

Input Set : A:\1010 SEQ LISTING.TXT

Output Set: N:\CRF4\08112003\I776705B.raw

Application Serial Number: US/09/776,705B

Alpha or Numeric or Xml: Numeric

Application Class:

Application File Date: 02-06-2001

Art Unit: 1600

Software Application: FastSEQ Total Number of Sequences: 78

Total Nucleotides: 67094 Total Amino Acids: 647 Number of Errors: 0 Number of Warnings: 0 Number of Corrections: 0

MESSAGE SUMMARY